MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 2, 2017/2018

TWT2231 – WEB TECHNIQUES AND APPLICATIONS

(All sections / Groups)

6 MARCH 2018
9:00AM – 11:00AM
(2 Hours)

INSTRUCTIONS TO STUDENTS

1. This question paper consists of 8 pages (including cover page) with **FIVE** questions only.
2. Attempt all **FIVE** questions.
3. All questions carry equal marks and the distribution of the marks for each question is given.
4. Please write all your answers in the Answer Booklet provided.

Question 1

(a) Client-side web development is a speedily emerging trend in website design. The client-side scripts can be used to control the behaviour of web browser and manipulate most HTML document elements. However, it has several drawbacks that limit its usage compared to the server-side scripting. Identify THREE limitations of client-side scripting in the web browser.

[3 marks]

(b) Write the HTML5 code to create a table with FOUR rows, TWO columns, and border width as ONE. Populate the table as in Figure given below using the following contents:

- Table caption: Daily Expenses
- Table header: Item, Expense (RM)
- Table footer: Total, 25.00
- Table content: -
  - Row 1: Breakfast and Lunch, 15.50
  - Row 2: Dinner, 9.50

Daily Expenses

Item	Expense (RM)
Breakfast and Lunch	15.50
Dinner	9.50
Total	**25.00**

[4 marks]

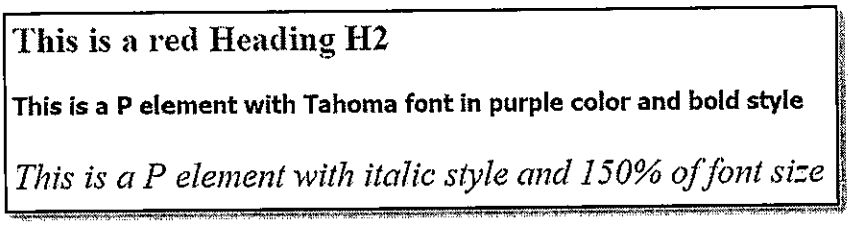
(c) Cascading Style Sheet (CSS) is a style sheet language that is used to describe the presentation of a document written in a markup language. Compare the strength and weakness of the THREE types of CSS that attached to a webpage.

[3 marks]

Continued ...

Question 2

(a) Write the CSS code to display result as shown in figure below. You are required to follow the setting of CSS displayed in the mentioned figure to create the HTML page. Note that you are required to write the CSS that is only reflected within the HTML tag.


This is a red Heading H2
This is a P element with Tahoma font in purple color and bold style
This is a P element with italic style and 150% of font size

[3 marks]

(b) Some characters are not able to be displayed in the HTML, like less than (<) or greater than (>) signs as the web browser might mix them with HTML tags. Compare TWO methods with examples that have been used to solve the problem above.

[3 marks]

(c) Many people assume Java and JavaScript are somehow related because JavaScript has "Java" in its name. Although they share the name "Java" in their name, they are two different programming languages. Compare Java and JavaScript by providing TWO differences between these programming languages.

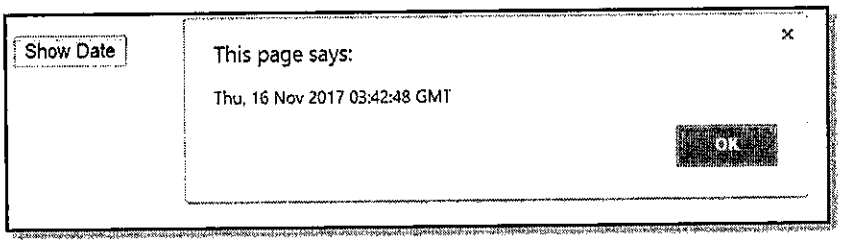
[4 marks]

Continued ...

Question 3

(a) The code below displays the current date and time using JavaScript. When the JavaScript function is called after the button is pressed, the current date and result are shown in the alert box as illustrated in figure below. You are required to finish the incomplete code in the JavaScript function below.

Output:




```
<!DOCTYPE html>
<html>
    <head><title>Show Date</title></head>
    <body>

      <!-- fill in the code below -->
```

```

```

```
      <input type="button" value="Show Date" onclick="show();">
    </body>
</html>
```

[3 marks]

Continued ...

(b) The following is a HTML form that has two fields. The first and second fields are named as "username" and "pwd", respectively.

(i) Write a PHP script to store the "username" and "pwd" information in cookies. The cookies shall last for 1 day only.

[2 marks]

(ii) Write a PHP script to display the information stored in cookies. The example of output is as follows.

"username: Jenifar.
pwd: twt2231."

[2 marks]

(c) XML schema describes the structure of an XML document, where it is intended to replace the DTD. Why XML schema is better than DTD?

[3 marks]

Continued ...

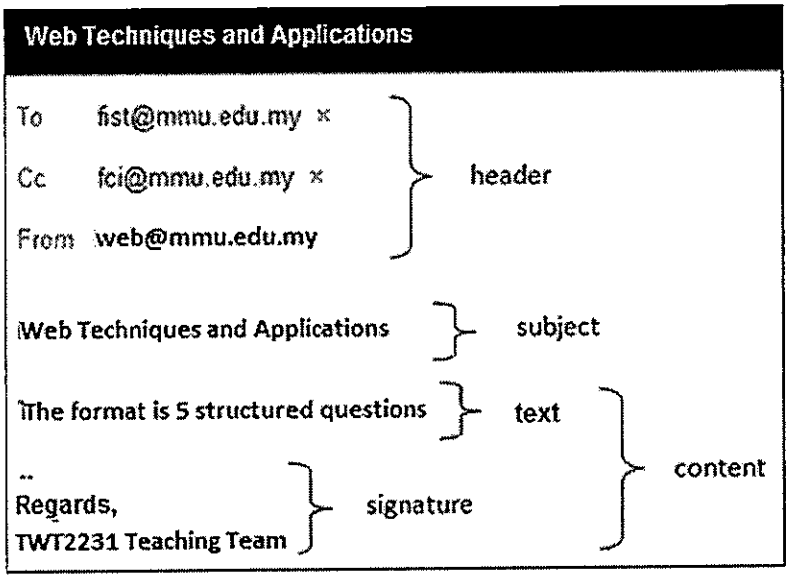
Question 4

(a) A DTD is a Document Type Definition that defines the structure and the legal elements and attributes of an XML document. Write the DTD that comply with the XML document given below.

```
<?xml version="1.0"?>
<!DOCTYPE student SYSTEM "employee.dtd">
<record>
  <employee>
    <id>1101</id>
    <name>Khairul Aziz</name>
  </employee>
  <employee>
    <id>1202</id>
    <name>Mary Wong</name>
  </employee>
</record>
```

[2 marks]

(b) Create an XML document to markup the email as shown in Figure given below.



[5 marks]

Continued ...

(c) Write a SQL statement that adds a new record to the Employee table using the information given below.

Employee (LoginName, CreatDate, Password, LastName, EmailAddress, WorkPhone)

Log in Name: webtech
Date: 2018-March-6
Password: webadmin
Last Name: Joseph
Email: webtech@mmu.edu.my
Phone: (606) 252 5400

[3 marks]

Continued ...

Question 5

(a) Owning a website comes with certain responsibilities. This means a regular website maintenance is a must if the website owner wants his website to be successful. Discuss how the regular maintenance should be done by the website owner.

[4 marks]

(b) Search Engine Optimization (SEO) is one of the important component in the internet marketing. Discuss FOUR reasons that make SEO become essential in the internet marketing.

[4 marks]

(c) There are several website maintenance tools used by the website owner to maintain their website. Discuss TWO website maintenance tools in this point of view.

[2 marks]

End of Paper